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THE SECRETARY OF HEALTH AND HUMAN SERVICES
WASHINGTON, D.C. 20201

JUN 9 1993

The Honorable Albert Gore, Jr.
President of the Senate
Washington, D.C. 20510

Dear Mr. President:

I am respectfully submitting the report required by section 6011(c) of the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239). That section required that the Health Care Financing Administration develop recommendations with respect to payments for hospitals under Medicare Part A for the costs of administering blood clotting factors to individuals with hemophilia and that those recommendations be submitted to Congress. The enclosed report fulfills that requirement.

Effective June 19, 1990, as required by section 6011(a) and (b) of P.L. 101-239, hospitals that are paid under the prospective payment system began receiving an additional payment for the costs of administering blood clotting factors to hemophiliacs. The authority to make this payment expired December 18, 1991. In this report, we evaluate the data we collected concerning the administration of hemophilia blood clotting factors. Although we made a separate payment for these factors for 18 months, the number of claims in the Medicare data base for blood clotting factors furnished to individuals with hemophilia is limited. We believe the number of hospital stays for hemophiliacs who require blood clotting factors as part of their treatment and the effect of the cost of those factors on the hospitals were overestimated when the decision to implement an add-on payment was made. Therefore, we are recommending that no special payment be made for these costs and that the authority to implement the pass-through payment not be reinstated.

The estimated cost to prepare this report was $10,000.

I am also sending a copy of this report to the Speaker of the House of Representatives.

Sincerely,

Donna E. Shalala

Enclosure

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THE SECRETARY OF HEALTH AND HUMAN SERVICES
WASHINGTON, D.C. 20201

JUN 9 1993

The Honorable Thomas S. Foley
Speaker of the House of Representatives
Washington, D.C. 20515

Dear Mr. Speaker:

I am respectfully submitting the report required by section 6011(c) of the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239). That section required that the Health Care Financing Administration develop recommendations with respect to payments for hospitals under Medicare Part A for the costs of administering blood clotting factors to individuals with hemophilia and that those recommendations be submitted to Congress. The enclosed report fulfills that requirement.

Effective June 19, 1990, as required by section 6011(a) and (b) of P.L. 101-239, hospitals that are paid under the prospective payment system began receiving an additional payment for the costs of administering blood clotting factors to hemophiliacs. The authority to make this payment expired December 18, 1991. In this report, we evaluate the data we collected concerning the administration of hemophilia blood clotting factors. Although we made a separate payment for these factors for 18 months, the number of claims in the Medicare data base for blood clotting factors furnished to individuals with hemophilia is limited. We believe the number of hospital stays for hemophiliacs who require blood clotting factors as part of their treatment and the effect of the cost of those factors on the hospitals were overestimated when the decision to implement an add-on payment was made. Therefore, we are recommending that no special payment be made for these costs and that the authority to implement the pass-through payment not be reinstated.

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Enclosure

REPORT TO CONGRESS

PAYMENT FOR BLOOD CLOTTING FACTORS ADMINISTERED TO MEDICARE INPATIENTS WHO HAVE HEMOPHILIA

Donna E. Shalala

Secretary of Health and Human Services
1993

EXECUTIVE SUMMARY

Section 6011(c) of the Omnibus Budget Reconciliation Act of 1989 requires a report from the Health Care Financing Administration (HCFA) on recommendations for payment to hospitals under Medicare Part A for the costs of administering blood clotting factors to patients with hemophilia.

This report includes these recommendations as well as the rationale for the recommendations. We briefly review the history of payment for blood clotting factors on a pass-through basis for Medicare hospital inpatients. In addition, we describe the data we collected during the implementation of the add-on payment, and the conclusions we made based on that data.

Based on our finding that the additional costs incurred by a hospital for the administration of blood clotting factors to Medicare inpatients with hemophilia are not as extensive or burdensome as originally estimated, we recommend that the authority to make payment on a pass-through basis for these costs not be reinstated and that no other special payment be made for these costs.

PAYMENT FOR BLOOD CLOTTING FACTORS ADMINISTERED TO MEDICARE INPATIENTS WHO HAVE HEMOPHILIA

This report is in response to section 6011(c) of the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239), which requires that recommendations be submitted to Congress concerning payment to hospitals under Medicare Part A for the costs of administering blood clotting factors to inpatients with hemophilia.

BACKGROUND

Hemophilia, a bleeding disorder characterized by prolonged clotting time, is caused by an inherited deficiency of a factor in plasma necessary for blood to clot. In 1964, a cryoprecipitate rich in antihemophilic factor activity was discovered and has helped in the management of acute bleeding episodes since that time. For purposes of this report, hemophilia is considered to encompass the following conditions: Factor VII deficiency (classic hemophilia); Factor IX deficiency (also called plasma thromboplastin component (PTC) or Christmas factor deficiency); and Von Willebrand's disease. The most common factors required by hemophiliacs to increase coagulation are Factor VIII and Factor IX; a small number of hemophiliacs have developed antibodies or inhibitors to these factors and require special treatment with other clotting factors.

The basis for therapy of bleeding episodes is transfusion of material containing sufficient clotting factors to temporarily correct the specific defect. Whole blood is not used for this purpose; its use is restricted to the restoration of blood volume following severe loss. Plasma with a high factor content may be used but factor concentrates are the preferred method of treatment since the content of factor is known and the load on the blood volume is less.

The widespread use of clotting factor concentrates has been associated with more frequent emergence of abnormalities in liver function test results and the transmission of hepatitis viruses to some persons with hemophilia. Manufacturers of clotting factors have continually pursued the development of methods for purification in an attempt to decrease the risks associated with their use. The emergence of human immunodeficiency virus (HIV) added impetus to the development of new and safer methods of producing clotting factors. Concern about maintaining a safe blood supply resulted in increased efforts to improve purification of coagulation factors.

A variety of methods currently exist to reduce and inactivate viruses in coagulation concentrates, and multiple variations exist within each category. Dry heating, pasteurization, suspension heating, vapor heating, use of solvent detergent, and monoclonal antibody purification are among the methodologies currently being used for viral inactivation.

With the new developments in viral inactivation and the production of purified clotting factors, there has also been a dramatic increase in costs. Several factors have contributed to this increase. The industry has committed significant resources in research and development to perfecting the purification process and ensuring a safe supply of coagulation factors. Changes in production processes resulting from new technology have significantly reduced the yield of coagulation factors from the donor pool. In addition, the current state of technology requires more plasma to produce one unit of a coagulation factor. Periodic shortages also contributed to price increases. Thus, rapidly changing new technologies with new products entering the market have functioned to enhance treatment efficacy, but at an increased cost.

In October 1989, the Prospective Payment Assessment Commission (ProPAC) completed a study entitled "The Adequacy of Prospective Payment for Medicare Beneficiaries with Hemophilia." ProPAC determined that, in the Medicare population, hemophilia patients treated in hospitals were distributed across several diagnostic-related groups (DRGs) and these patients had higher inpatient operating costs than other patients. However, while payments under the hospital inpatient prospective payment system (PPS) were slightly higher for inpatients with hemophilia, the relative payment-to-cost ratios were lower. On October 2, 1989, the Commission recommended to Congress that a prospectively determined add-on payment for Medicare patients requiring clotting factors be implemented and the payment should be determined on a per unit basis, based on an average of the types of clotting factors available.

In response to this recommendation and growing concern about increasing hospital costs for treating hemophiliacs, Congress enacted section 6011 of P.L. 101-239. This section amended section 1886(a)(4) of the Social Security Act (the Act) to provide that hospitals paid under PPS receive an additional payment for the costs of administering blood clotting factors to hemophilia inpatients. Section 6011(b) required that the amount of payment to be made to hospitals for the costs of administering blood clotting factors to hemophilia inpatients be calculated by multiplying a predetermined price per unit of clotting factor by the number of units provided to the patient. This price was to be determined in consultation with ProPAC. Section 6011(d) provided that this additional payment should apply to items furnished 6 months after the date of enactment of P.L. 101-239 (that is, June 19, 1990) and should expire 2 years after the date of enactment (that is, December 19, 1991).

PAYMENT RATE FOR INPATIENT HEMOPHILIA BLOOD CLOTTING FACTORS

In a final rule with comment period entitled "Mid-Year Changes to the Inpatient Hospital Prospective Payment System," published in the Federal Register on April 20, 1990 (55 FR 15150), we established a price per unit of clotting factor based on the latest (1990) price listing available from the Drug Topics Red Book, which is the publication of pharmaceutical average wholesale prices. Although ProPAC originally recommended that we set an add-on payment amount for clotting factors based on a weighted average of the types of clotting factors available, we believed it was more appropriate to set three separate add-on amounts, one for each of the three basic types of clotting factors. A comparison of the wholesale prices for the different types of clotting factors (that is, Factor VIII, Factor IX, and the other factors which are given to those patients with inhibitors to Factors VIII and IX (designated as anti-inhibitors in this document)) revealed great variations among the three types. The Factor IX products are priced much lower than the Factor VIII products, and the special anti-inhibitor factors are priced higher than both of the other factors. Therefore, we believed it would be more equitable to set an add-on payment amount for each type of blood clotting factor.

The add-on payment amount for each of the three types of factors was based on the median average wholesale price (AWP) of the several products available in that factor category. However, since we were aware that hospitals are generally able to negotiate direct selling prices with the various drug companies that are lower than the wholesale prices listed in the Drug Topics Red Book, we discounted the AWP by 15 percent before calculating the median price. This 15 percent discount was based on the results of a study conducted by the Department's Office of Inspector General (OIG) entitled "Use of Average Wholesale Prices in Reimbursing Pharmacies Participating in Medicaid and Medicare Prescription Drug Program" (Report No. A-06-89-00037, October 3, 1989). The OIG determined that the AWP of a drug is heavily discounted in direct sales and that current data show that this discount averages 15.5 percent. In addition, the OIG report states that the AWP is not a meaningful payment level and should not be used for making payment for drugs under Medicare.

The add-on payment amounts we established for Federal fiscal year (FY) 1991 for the three types of blood clotting factors were as follows:

Factor VIII - $.64 per unit
Factor IX - $.26 per unit
Other Hemophilia
Clotting Factors
(i.e., anti-inhibitors) - $1.00 per unit

Under the requirements of section 6011(b) of P.L. 101-239, payment to hospitals was calculated by multiplying the appropriate factor amount per unit by the total number of units of blood clotting factor administered. Those payment amounts were updated effective October 1, 1991.

In the final rule concerning changes to the Medicare hospital inpatient PPS for FY 1992, published in the Federal Register on August 30, 1991 (56 FR 43223), we reevaluated the price per unit for blood clotting factors used by hemophilia inpatients, based on the 1991 Drug Topics Red Book. Using the same methodology as was used to set the FY 1991 add-on payment amount, we calculated updated price per unit of factor for FY 1992 as follows:

Factor VIII - $ .72
Factor IX - $ .26
Anti-inhibitors - $ 1.11

DATA ANALYSIS

Although this report was due to Congress on June 19, 1991, we did not have a sufficient number of claims for blood clotting factors to review before September 1991. This is because there is a delay of several months between the time a patient is discharged and the time the charge and other data from the hospital stay are available in our data files. Our data analysis is based on all claims received in HCFA as of October 10, 1991. At that time, we had data available on 376 admissions that occurred between June 19, 1990, and September 1, 1991, for which a blood clotting factor was administered. We cannot use data from discharges prior to June 19, 1990, because although we can identify patients who had hemophilia as a principal or secondary diagnosis, there is no way to identify which of those patients received blood clotting factors during their hospital stay. Identification of those patients is possible only for discharges occurring on or after June 19, 1990, when we developed the specific codes to identify the three types of blood clotting factors and instructed hospitals how to include the codes on their claims for payment purposes.

The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis codes we used to identify hemophilia are the following:

286.0	Congenital factor VIII disorder
286.1	Congenital factor IX disorder
286.2	Congenital factor XI deficiency
286.3	Congenital deficiency of other clotting factors
286.4	Von Willebrand's disease

Both ProPAC and HCFA agree that these codes encompass the hemophiliac conditions for which it is medically appropriate to administer blood clotting factors.

Our statistical analysis was significantly impeded by the quantity and quality of the data. Of the 376 discharges reporting the administration of a hemophilia blood clotting factor, only 98, or 26 percent, had an ICD-9-CM diagnosis code of hemophilia entered on the claim. When hemophilia is the reason for admission to the hospital, the case is coded with one of the ICD-9-CM diagnosis codes listed above as principal diagnosis and is assigned to major diagnostic category (MDC) 16 (Diseases and Disorders of the Blood and Blood Forming Organs and Immunological Disorders). When hemophilia is secondary to the principal reason for admission, as is more often the case, DRG classification is determined by the principal diagnosis, as well as the procedures performed during the stay, the patient age, and other comorbid and complicating conditions. There were 35 admissions with a principal diagnosis of hemophilia and 63 admissions with a secondary diagnosis of hemophilia. Patients receiving hemophilia blood clotting factors were assigned to 62 different DRGs. However, the largest group was assigned to MDC 16, which accounted for 44 cases.

The 278 discharges for which no hemophilia diagnosis was recorded on the claim did include some cases that may have required the administration of clotting factors. Other coagulation defects, including hemorrhagic disorders due to circulating anticoagulants, defibrination syndrome, and acquired coagulation factor deficiency (ICD-9-CM diagnosis codes 286.5 through 286.9) accounted for principal or secondary diagnoses for 24 admissions. However, the language of the statute is precise in stating that the add-on payment is available only to patients with hemophilia, which has been defined as diagnosis codes 286.0 through 286.4. Therefore, we did not use these claims in our analysis.

Our review of the remaining 204 discharges without a hemophilia diagnosis reported identified one hospital that had claimed the add-on payment for blood clotting factors for 183 discharges. Of these, only one patient had a hemophilia diagnosis reported on the claim. We requested a review of these claims by the peer review organization (PRO) responsible for the State in which the hospital is located. The PRO review discovered that the clotting factor had actually been administered to only one patient (the one with a diagnosis of hemophilia) and that the other blood clotting factor units and charges had been billed in error.

Upon receiving copies of these claims from the PRO, we discovered that most of the claims were for patients with end-stage renal disease (ESRD). We believe this hospital has been using an incorrect revenue code, substituting the blood clotting factor code of 636 in place of a code more relevant to ESRD patients, possibly the code for the drug Epoitein (634 or 635). We have taken administrative action to correct these claims and reprocess them for appropriate payment.

For purposes of this report, we have limited our analysis to those 98 cases that we can identify as cases in which blood clotting factors were administered to inpatients with hemophilia. As noted above, in 35 cases the hemophilia diagnosis was listed as the principal diagnosis. In the remaining 63 cases it was a secondary diagnosis. These 98 cases were treated at 37 different hospitals. The distribution of number of claims by hospital is identified in Table 1.

There were 3,177,900 units of clotting factors administered to the 98 hemophilia inpatient admissions, with charges totalling $3,706,808. Factor VIII accounted for the greatest number of units with 1,763,300 units (55.5 percent of the total) and $1,825,685 in charges (49 percent of the total). There were 281,300 units (8.9 percent) of Factor IX administered with charges of $103,995 (3 percent). The Other Factors category accounted for 1,133,300 units (35.7 percent) and $1,777,128 in charges (48 percent). (See Table 2.)

As also shown in Table 2, the average charge for a clotting factor per case was $37,825, with the highest charge per case for the Other Factors ($84,625) and the lowest for Factor IX ($5,200). The average number of units administered per case also ranges widely, from 53,967 units for Other Factors to 14,065 units for Factor IX, with an average of 32,448 for all hemophilia cases. The average total charge for the 6,615 hemophilia admissions in which no clotting factor was administered was $15,581 compared to an average charge of $70,313 for the 98 hemophilia admissions requiring administration of blood clotting factor. It is clear that the administration of blood clotting factors results in a significant additional charge per case.

The principal diagnosis for the 63 admissions with hemophilia as a secondary diagnosis ranged across 49 different diagnoses, precluding any reasonable conclusion regarding the relationship between the administration of a blood clotting factor and principal diagnosis. While we had assumed prior to this analysis that a clotting factor was administered most frequently in surgical cases (in order to control bleeding), this assumption was not supported by the data. Only 13 of the 98 admissions were assigned to a surgical DRG. The medical cases outnumber the surgical by more than 5 to 1.

When examining total case charges, the available data indicate that the average charge for surgical cases with the administration of a blood clotting factor was significantly lower ($52,948) than with medical cases ($72,968). This difference in charges is almost completely accounted for by a difference in the average charge per case for the administration of a clotting factor, which is $24,243 for surgical cases and $39,902 for medical cases. The greatest differential between surgical and medical average charges per case occurs with Factor IX ($29,144 for medical cases and $9,063 for surgical cases) and Other Factors ($9,731, surgical and $137,677, medical). However, in each case, there was only one surgical admission for each of these factors. Table 3 compares charges for surgical and medical admissions. The comparison of charges for hemophilia inpatients with and without blood clotting factors clearly indicates a substantial difference, with the clotting factor cases incurring charges 355 percent higher than cases for hemophilia patients who did not receive clotting factors.

We encountered numerous difficulties in attempting valid statistical analysis of the cost of clotting factors and its impact on individual hospitals. For the same factor (Factor VIII), the amount charged per unit varied from a low of $.007 to a high of $387.98. In addition, the number of reported units did not always correlate reasonably with the reported charges. For example, within one hospital, the charge for 100 units of a factor was the same as that reported for 10,000 units of the same factor. While the add-on payment established by HCFA for costs of the blood clotting factor is based on the median AWP, with recognized prices occurring both above and below the median, the differential experienced both within and among hospitals is too great to be explained by the range of costs of each type of factor. Given the large fluctuations in reported charges, it was not possible to arrive at a definitive conclusion regarding the actual amount charged per unit.

As shown in Table 1, during the review period, of the 37 different hospitals that administered blood clotting factors to hemophilia patients, only eight hospitals treated four or more cases. The majority of hospitals (26) submitted only one or two claims. Table 4 shows the distribution of cases, units, and charges of the eight hospitals treating four or more cases. Even among these hospitals, there is a great deal of variation in the volume of clotting factor provided and the charges made by the hospital. The results of our study parallel those of ProPAC. That is, cases were distributed across many hospitals, with few hospitals treating as many as four cases.

We believe the small number of cases in each hospital (10 or fewer in all but one hospital) is sufficient basis to conclude that an add-on payment is not necessary or appropriate. In the past, under similar circumstances involving low numbers of patients, we made changes neither to DRG assignment nor payment amount. To permit special circumstances for hemophilia blood clotting factor patients could set an undesirable precedent for other low-volume, high-cost cases, providing an exception that contradicts the basic principle of PPS. That is, under PPS, Medicare does not pay for the costs of individual cases. Rather, payment is based on an averaging process, with those cases that incur costs above the payment being offset by those cases that incur costs below the payment. The incentive to the hospital is to manage its operation more efficiently by evaluating those areas where increased efficiencies can be instituted without adversely affecting the quality of care and by treating a mix of patients so that payment in excess of cost in one case will offset cost in excess of payment in another case.

Our evaluation of the relationship between Medicare costs and Medicare payments, using the most recent complete cost report information (FY 1987 to FY 1990), identified only three of the eight high-volume hospitals with a negative average Medicare operating margin. (A negative operating margin means that a hospital incurred costs in excess of payment for its Medicare patients.) Without a high concentration of cases in a hospital, the impact of treating hemophiliacs with clotting factor is distributed across many hospitals treating a low volume of these patients, with no significant impact on profit margins. As noted above, this is consistent with the overall design of PPS. That is, payment is based on an averaging process, in which cases receiving payment in excess of costs are to balance cases incurring costs in excess of payments.

Because most hemophiliacs are younger people who are not covered under Medicare, the impact of the disease on hospital inpatient costs for the Medicare population is minimal. Hospital inpatient payment is determined in part by the DRG relative weight, which is calculated based on charges submitted by the hospital. The DRG relative weights are recalculated annually, in a process known as recalibration, based on the latest hospital charge data. When a specific treatment, procedure, disorder, or condition results in increased charges, these are included in the figures used in recalculating the DRG weight. Thus, the additional charges made for administration of blood clotting are included in the charges used in recalibrating the weights.

When a given DRG experiences wide fluctuations in costs, or in some manner does not function to appropriately cover the costs of treatment, modifications to the DRG system are warranted. However, as is the case with hemophilia patients receiving blood clotting factors, when the cases are distributed across many DRGs, rather than being assigned to a single DRG or class of

DRGs, DRG modification may not be the most feasible nor appropriate method of responding. In such instances, additional payment has been provided for those cases that incur excessively high charges or long lengths of stay. These cases are referred to as "cost outliers" or "day outliers," respectively. The purpose of the outlier payment is to protect the hospital from significant financial loss in cases similar to those incurred by hospitals for treating hemophilia patients receiving blood clotting factors. Approximately 9 percent of the cases we analyzed received outlier payments.

Based on our analysis, we believe that the costs incurred by hospitals for administering blood clotting factors to hemophiliacs are adequately addressed through the existing payment methodology, including annual recalibration of the DRG weights and additional payment made for outlier cases. We note that ProPAC, in its March 1, 1992 Report to Congress, now agrees that current PPS payment policies adequately compensate hospitals that treat Medicare beneficiaries with hemophilia. (Recommendation No. 8, pp. 48-49) Therefore, ProPAC did not recommend reinstatement of the add-on payment.

RECOMMENDATION

Based on the low volume of cases that require the administration of blood clotting factors, and the fact that these cases are not concentrated in a few hospitals nor do they seem to adversely affect any hospital, we believe the costs incurred by the administration of blood clotting factors is most appropriately and equitably addressed through the existing payment methodology. Therefore, we are recommending that the add-on payment to a hospital under Medicare Part A for the costs of administering blood clotting factors to individuals with hemophilia not be reinstated. In addition, we do not recommend that any other special payment be made for these costs.

CONCLUSIONS

Based on our analysis of the data, we are recommending that no additional payment be made for blood clotting factors administered to Medicare hospital inpatients. As a result of our data review, however, we have notified the fiscal intermediaries to recover payment made to hospitals for hemophilia blood clotting factors administered to patients who do not have hemophilia.

TABLE 1

DISTRIBUTION OF CLAIMS

NUMBER OF CLAIMS	NUMBER OF HOSPITALS
1 - 3	29
4 - 5	4
6 - 10	3
11 - 15	0
over 15	1

TABLE 2

DISTRIBUTION OF UNITS AND CHARGES BY TYPE OF FACTOR

TYPE OF FACTOR	NUMBER OF ADMISSIONS	TOTAL UNITS	AVERAGE NUMBER OF UNITS PER ADMISSION	TOTAL CHARGES FOR UNITS	AVERAGE CHARGE PER ADMISSION	AVERAGE CHARGE PER UNIT
FACTOR VIII	64	1,763,300	27,552	$1,825,685	$28,526	$1.04
FACTOR IX	20	281,300	14,065	$ 103,995	$ 5,200	$0.37
OTHER FACTOR	21	1,133,300	53,967	$1,777,128	$84,625	$1.57
TOTAL ALL FACTORS	98*	3,177,900	32,448	$3,706,808	$37,825	$1.17

*Number of admissions for separate factors exceeds total number of admissions because more than one type of factor was administered during some hospital stays.

TABLE 3

COMPARISON OF UNITS AND CHARGES FOR SURGICAL AND MEDICAL CASES

TYPE OF CASE	NUMBER OF CASES	UNITS	AVERAGE CHARGE PER CASE CLOTTING FACTOR	AVERAGE TOTAL CHARGE PER CASE
FACTOR VIII				
SURGICAL	11	240,200	$28,299	$ 60,869
MEDICAL	53	1,523,100	$28,574	$ 54,643
TOTAL	64	1,763,300	$28,526	$ 55,712
FACTOR IX				
SURGICAL	1	18,700	$ 3,779	$ 9,063
MEDICAL	19	262,600	$ 5,275	$ 29,144
TOTAL	20	281,300	$ 5,200	$ 28,140
OTHER FACTOR				
SURGICAL	1	100	$ 90	$ 9,731
MEDICAL	20	1,133,200	$88,852	$137,677
TOTAL	21	1,133,300	$84,625	$131,584
ALL SURGICAL	13	259,000	$24,243	$ 52,948
ALL MEDICAL	85	2,918,900	$39,902	$ 72,968
TOTAL CASES	98	3,177,900	$37,814	$ 70,313

TABLE 4

DISTRIBUTION OF CASES BY UNITS AND CHARGES BY HOSPITAL

HOSPITAL NUMBER	NUMBER OF CASES	NUMBER OF UNITS	TOTAL CHARGES FOR UNITS	AVERAGE CHARGE PER UNIT	AVERAGE CHARGE PER CASE
1	18	521,100	$538,746	$ 1.03	$ 29,930
2	10	355,000	$258,887	$ .73	$ 25,889
3	7	40,800	$ 72,010	$ 1.76	$ 10,287
4	7	4,400	$ 60,646	$13.78	$ 8,664
5	4	298,400	$418,727	$ 1.40	$104,681
6	4	48,600	$ 25,743	$ .53	$ 6,436
7	4	36,000	$ 8,729	$ .24	$ 2,182
8	4	45,500	$154,047	$ 3.30	$ 68,327

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